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<b>14. ABSTRACT</b>  <b>Purpose:</b> With increased demand for nursing care to be evidence based, questions arise whether existing evidence can safely be applied to the modern battlefield. The specific aims of this study were to analyze the captured accounts of battlefield nursing care and to use that information to establish a list of research and evidence based practice projects (EBPPs). <b>Design:</b> Qualitative descriptive <b>Methods:</b> Through focus groups, participants were asked to describe battlefield-nursing care by recounting how it was the same and/or different from care they delivered before they deployed. They were also asked how much of their care in Iraq they considered to be based on existing evidence. Finally, they were asked to recommend 2-3 nursing research studies and EBPPs. Using the results of the focus group analysis, an expert panel generated a prioritized list of researchable categories and proposed examples of feasible studies and EBPPs that can be used to guide military nurse scientists. <b>Sample:</b> 11 focus groups (83 informants) of nurses from all combat support hospital sites in Iraq (11 sites). <b>Analysis:</b> Guided by naturalistic inquiry framework, content analysis was used to inductively examine previously collected data. <b>Findings:</b> The expert panel members ranked the resultant categories in the following order: See Final Report. <b>Implications for Military Nursing:</b> Using battlefield generated accounts to guide military nurse scientists' work has the potential to improve the quantity and quality of studies.					
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## II. Abstract

**Purpose:** With increased demand for nursing care to be evidence based, questions arise whether existing evidence can safely be applied to the modern battlefield. The specific aims of this study were to analyze the captured accounts of battlefield nursing care and to use that information to establish a list of research and evidence based practice projects (EBPPs).

**Design:** Qualitative descriptive

**Methods:** Through focus groups, participants were asked to describe battlefield-nursing care by recounting how it was the same and/or different from care they delivered before they deployed. They were also asked how much of their care in Iraq they considered to be based on existing evidence. Finally, they were asked to recommend 2-3 nursing research studies and EBPPs. Using the results of the focus group analysis, an expert panel generated a prioritized list of researchable categories and proposed examples of feasible studies and EBPPs that can be used to guide military nurse scientists.

**Sample:** 11 focus groups (83 informants) of nurses from all combat support hospital sites in Iraq (11 sites).

**Analysis:** Guided by naturalistic inquiry framework, content analysis was used to inductively examine previously collected data.

**Findings:** The expert panel members ranked the resultant categories in the following order:

Category	Selected Example
#1 Patient Care	Establish nurse sensitive outcome indicators for the various deployed patient care settings
#2 Nurses	Identify and test ways to build clinical confidence pre-deployment
#3 Equipment, Medication and Supplies	Describe how medication, supplies and equipment are adapted for use and what are the impacts
#4 Care of Local Nationals	Develop techniques to increase accuracy and trust between patients and nurses when using local nonmedical translators
#5 Communication	Are the necessary elements of care being documented?
#6 Adapting and Improvising	If the standard method for cleaning/sterilizing equipment is not available, what alternate method can safely be used?

**Implications for Military Nursing:** Using battlefield generated accounts to guide military nurse scientists' work has the potential to improve the quantity and quality of studies.

**III. TSNRP Research Priorities that Study or Project Addresses****Primary Priority**

Force Health Protection:	<input type="checkbox"/> Fit and ready force <input checked="" type="checkbox"/> Deploy with and care for the warrior <input type="checkbox"/> Care for all entrusted to our care
Nursing Competencies and Practice:	<input type="checkbox"/> Patient outcomes <input type="checkbox"/> Quality and safety <input type="checkbox"/> Translate research into practice/evidence-based practice <input type="checkbox"/> Clinical excellence <input type="checkbox"/> Knowledge management <input type="checkbox"/> Education and training
Leadership, Ethics, and Mentoring:	<input type="checkbox"/> Health policy <input type="checkbox"/> Recruitment and retention <input type="checkbox"/> Preparing tomorrow's leaders <input type="checkbox"/> Care of the caregiver
Other:	<input type="checkbox"/>

**Secondary Priority**

Force Health Protection:	<input type="checkbox"/> Fit and ready force <input type="checkbox"/> Deploy with and care for the warrior <input type="checkbox"/> Care for all entrusted to our care
Nursing Competencies and Practice:	<input type="checkbox"/> Patient outcomes <input type="checkbox"/> Quality and safety <input type="checkbox"/> Translate research into practice/evidence-based practice <input type="checkbox"/> Clinical excellence <input type="checkbox"/> Knowledge management <input type="checkbox"/> Education and training
Leadership, Ethics, and Mentoring:	<input type="checkbox"/> Health policy <input type="checkbox"/> Recruitment and retention <input type="checkbox"/> Preparing tomorrow's leaders <input type="checkbox"/> Care of the caregiver
Other:	<input checked="" type="checkbox"/> Research and EBP priorities

#### IV. Progress Towards Achievement of Specific Aims of the Study or Project

##### Findings related to each specific aim, research or study questions, and/or hypothesis:

The specific aims of this study were two-fold *using data already collected*:

**AIM 1:** Elucidate unique and common nursing practice in a deployed combat environment as compared to a peacetime non-deployed environment. This was the first step and included using content analysis under the direction of the consultant Dr. Lynne Connelly.

**AIM 1 Findings:** Already collected focus group tapes yielded 400+ pages of transcription from 11 focus groups representing a total of 83 nurses. *Table 1* captures the major themes, descriptions, and representative quotes from the analyzed data.

Table 1. **Major Themes, Descriptions, and Representative Quotes**

Theme	Description	Quote
Equipment and Resources	The informants talked about tubing, suction, oxygen, and bed issues, as well as pumps, ventilators, wound vac, lack of biopatch, ETT issues, pediatric supply, equipment problems, and needle issues. A sub theme was <i>adaption</i> .	“Trying to find things that work for pediatric patients. We’re supposed to be taking care of US adult soldiers and a lot of our patients up in ICU 2 always end up being pediatric burn patients and we do not always have things that fit pediatric patients and trying to get with pharmacy to do the correct drips. We do not have kangaroo pumps, we do not have IO syringe pumps either so you mix doing different things with your IV fluid mixes and even with the equipment itself, you know cutting down tubes so they fit.”
Adaptation and Improvising was necessary	References to various objects that were adapted or changes that were required in the delivery of care given if they did not fit into the supplies and equipment category.	"there are ways to get around every single problem. You bag your patient from point A to point B instead of having them on a vent, or you hang drips under gravity"
Communication is troublesome at all levels	Informants described advon teams not bringing information back to deployers, lack of communication between units, and leadership not sharing information. Hospitals did not have patient call bell systems.	“we don’t know what is coming through the door so you just get ready for the triple amputee every time”, “tried to contact the unit we were replacing to find out what to bring but it didn’t work”, “All the good evidence (CPGs) is not filtering down”,

Language Barrier & Translator Issues	Nurses talked about the skill level and that maybe they weren't trained medically. Also, concern about info that was being translated.	"I have to bring up the point that a lot of our translators do not translate what you are telling them. Case in point we had a patient who was paralyzed. They did not want to tell the patient that she was paralyzed. She wanted to have that hope that she wanted to walk again and to do all that stuff again. The interpreters were not telling her that she won't walk again".
Culture and Care of Local Nationals	Included discussions about nutrition, language issues, family and spiritual needs, gendered differences, as well as the differences between US military delivered care and local care.	"it just amazed me people would give them spaghetti or something because I think many people just don't understand" They like rice, they like plain chicken, not spicy hot, fruit, They like fresh fruits"
Safety/Delays in care/Triage happen due to multiple factors	Informants talked about delays in air evac, translator issues, and an elevator breaking down that delayed care. Nurses talked about conflicts over gate triage, safety issues, and resetting the standard of emergent	"So it's just challenging in that you don't know what's going on with them and you have to wait for someone to come and help you try to figure out what's going on with that patient or you to communicate"
Iraqi Health Care System is Unsafe and Unsanitary	Nurses described dirty conditions at local hospitals, lack of medication, and serious concern for safety. No continuity when patients were sent to local facilities.	"I think the children are the hardest. I sent a kid with a bullet wound through the head. The dad did not come back that morning before the Med City run and I gave him as much morphine as I could give for his ride there. But unless somebody was there with morphine to give him pain medication. I don't even know if his father met him there I don't know what happen he was only ten years old"
Time with Patients & Staffing is better but is it the right skill mix?	References to whether the proper numbers or types of nurses were appropriate to an area of nursing in Iraq. The right person for the right job? Suggestions were given for a better mix. Examples of a poor mix or inadequate nurse coverage by specialties were cited by informants. RN to	"I like it better here believe it or not. Back in the states I could be the only RN on the floor with 20 patients and have 2 or 3 LPNs, here I have other RNs. So I think the staffing here is better. Yes I have ancillary personnel, yes I have medics, techs but I have physical RNs. They kind of help share that load with me."

	patient ratios were lower.	
Emotional Expressions of Nurses	Nurses talked about unrealistic expectations, not getting closure with patients, not able to let off steam, lack of safety, and forsaking the patient for speed.	"So you come here with unrealistic expectations of what can be done because you don't have anything to draw from a military point of view"
Standards/Scope of Practice was an issue mostly for LPNs and Medic	References made to limitations and legality of practice of nurses, nurse practitioners, medics and physicians in Iraq. Mostly the talk was about LPNs and Medic going beyond scope or limited	"Give me something; give me a book on theater practice about what they can do and what they can't do. Right now, we just want someone to tell us today they can do this and tomorrow they can't...we just want some rules, some set rules so we know how to do things just like in the real world
Documentation is like being thrown back into the middle ages	Nurses talked about types of documentation and the lack of documentation received or given when patients were cared for or transferred.	"we tend not to look at that paper charting as diligently as we would a computer chart where we could just kind of scroll down and see what happened, it's kind of a quicker process...paper charting is like being thrown back into the middle ages"
Infection Control is completely different or absent	The discussions involved issues of lack of isolation, TB concerns, MRSA concerns, acinebactor concerns, OR lack of isolation of cases, and environmental infection issues regarding the spread or containment of disease.	"just come in my office and you will see brown water", "we don't have isolation rooms, "OR traffic is uncontrolled"
Leadership demands are more consuming in the Combat Zone	Nurses talked about their leaders not being comfortable clinically, junior officers talked about not feeling like they were heard, and OIC, Sec Supervisors talked about the increased demands.	"That is probably one of the biggest differences is what happen to us while we are here. We are getting more stress as managers. Deb has mentioned that and Karen has mentioned the same thing. I know there is way lot more stress on me today taking care of the education and training needs of the staff. I 've got a couple issues with not only to deal with their professional but now slowly we are also getting personal issues the longer we stay in this theater."
Pace & environment of Care is much faster (Quicker	Nurses talked about the pace of trauma and specifically	"that quick turn around on all the patients, just in how that manages your

Process)	blood transfusions but also feared missing things due to the pace.	time. I mean people say time management but we are not realizing that if you get a patient in, maybe even at 6 am they might have to be ready to go by 6 pm and had to have had many antibiotics so it's a quick turnaround"
Types of Patients	Nurse describe trauma as being much different: GI, appies, chest pain, TB, psychiatric, OB GYN, and different normal norms for BPs and HRs in local nationals.	"and types of injuries that we see are definitely more drastic than what we see in the states. It's amazing to me to see somebody who comes in and 15 minutes later can be up in the OR?
Teamwork during Deployment is better	Nurses talked about increased camaraderie and better communication with physicians mostly due to availability.	"we're more of a team here than back in the states. We get a patient every body works together, more so here than back in the states".
Lack of Patient Privacy	Issues regarding the cultural environment that address proper sheltering of patients regarding modesty when rendering care. It also involved respecting the cultural practices by covering patients and providing closed environments (curtains) around the eating practices of the Iraqi people.	"Also they very are modest people and, we don't give them any modesty, sometimes not because we are being rude but there is no place to give them privacy. We do not have curtains around the beds and the first thing they do is strip them down and when they go to surgery they are naked. That is just not part of their customs"
Detainee Care is thankless and makes you feel conflicted	Nurses talked about losing themselves, being called a traitor for caring for detainees, and feeling like their supplies were less because of their mission. They felt hate toward the detainees and it delayed care because of them being tied down. Nurses described personal danger and being hit by patients.	"I think it makes you cold and I don't think any of us got into nursing because we're cold people but it's the difference between hey what do you need, what can I get for you and waiting for them to ask. I mean for me it is and it makes me a little bit nervous for when I go home like how much of that is going to stick with me and how cold am I going to be to a patient that previously I cared about."
Nursing Care Addressing EBP	Some suggested new evidence and some suggested using combat evidence to inform noncombat nursing.	"maybe we need new evidence here, we need theatre specific evidence"
Pre-Deployment Training was inadequate at every turn	Pros and cons of what training might be needed versus what	"if they are going to put as many resources, logistically and financially

	training was given or offered. Suggestions by nurses included preparing them immediately before deployment. Topics that stood out as needing more training/experience pre-deployment were pediatrics, OB, & Trauma.	into JRTC, why can't they just look at what we were actually gonna be expecting. They knew that we were going to be in Mosul and Baghdad. I know we are kind of supporting this 10 <sup>th</sup> mountain division that was out there with us but if they knew kind of what situation we would be in why"
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**AIM 2:** Establish a prioritized list for Research and Evidence Based Practice Projects (EBPPs) as they uniquely relate to the deployed environment. When the study was written, the analysis plan included this step, but when data collection began, it became evident to the investigator that although the group could describe battlefield-nursing practice they were not able to identify research or EBPP questions or give examples of studies. For this aim, a panel of nursing research experts reviewed the findings from the content analysis, along with a summary of the reviewed literature, in order to establish a prioritized list of potential studies and EBPPs.

**AIM 2 Findings:** A summary of the study methods, sample, and content analysis findings were provided to the four Expert Panel members along with the review of literature summary. A face to face meeting resulted in generating a list of categories and potential studies/EBPPs which were then independently ranked by all 4 panel members. The results of the Expert Panel are in Table 2.

Table 2. Categories and Research Studies/EBPPs List Created by Expert Panel

Categories in order of priority	Examples of Studies/EBPPs
1. <u>Patient Care</u>	<ul style="list-style-type: none"> <li>- Factors, frequency, and quality of handwashing during deployment.</li> <li>-Identify and test equipment minimally needed to equip for and maintain the principles of infection control in multiple environments.</li> <li>- Factors, frequency, and impact of nurses teaching/using their own personal stress reduction strategies to/for patients.</li> <li>-How should/do best practices/CPGs get communicated and does it make a difference (across the deployed areas) in patient outcomes?</li> <li>-What is best alternative to a call-bell system on inpatient units?</li> <li>-Establish nurse sensitive outcome indicators for the various patient care settings.</li> <li>-What is the best methodology for adapting nondeployed standards and standard operating procedures?</li> </ul>

	<ul style="list-style-type: none"> <li>-Does scope of practice change during deployment and if so how, why and what is the impact?</li> <li>-Can shared governance at the nursing unit level be followed during deployment and if so how and to what benefit?</li> <li>-Can stateside nursing consultants increase quality of care on the battlefield?</li> </ul>
2. <u>Nurses</u>	<ul style="list-style-type: none"> <li>-Examine the potential for moral distress for nurses who have to discharge patients to local substandard hospitals and how to deal with and adapt to it.</li> <li>-How do nurses react to compromises resulting in moral distress? Do these compromises impact nurse resilience?</li> <li>-What is the correct pre-deployment experience (education level, time in specialty, exposure in specialty) within each specialty to ensure quality patient care?</li> <li>-Explore emotional and moral dilemmas of triage, limited resource-decision making, and safety in combat.</li> <li>-Factors that impact onset, duration, and intensity of compassion fatigue.</li> <li>-Follow-on reintegration studies.</li> <li>-What is emotional healing and how does it occur?</li> <li>-If you have had a moral lapse what is the best recovery method “companion recovery model”?</li> <li>-Nursing experience versus rank and how to have nursing experience heard when rank is a barrier.</li> <li>-Identify and text ways to build clinical confidence during pre-deployment.</li> <li>-Is there a moral dilemma created when providing care to detainees? How does this dilemma affect nursing care and patient outcomes?</li> <li>-Are there different reintegration needs for nursing who took care of detainees?</li> <li>-What are the variables that promote cohesive teamwork (exp, rank, shared stress)?</li> </ul>
3. <u>Equipment, Medication, and Supplies</u>	<ul style="list-style-type: none"> <li>-Factors, frequency, and impact of using medication, equipment and supplies designed for adults in caring for pediatric patients.</li> </ul>

	<ul style="list-style-type: none"> <li>-Describe how medication, supplies and equipment are adapted for use and what are the impacts?</li> <li>-What is the best way to maintain the principles of the standard of care when medication, supplies and equipment are unavailable and/or inadequate?</li> <li>-What medication, supplies and equipment are vital and what is substitutable?</li> <li>-Can expired medications and alternate use medications be safely used and if so under what circumstances (develop guidelines)?</li> </ul>
4. <u>Care of Local Nationals</u>	<ul style="list-style-type: none"> <li>-Do nurses experience moral distress and if so, what are the issues and how do they cope?</li> <li>-What is the relationship between local cultural competency, language, communication and compassion between patients and nurses?</li> <li>-What is the impact of local culture on the experience of illness and spiritual care?</li> <li>-Is it desirable, feasible, and/or useful to use nonmilitary medical social Anthropologists to study local health/illness?</li> <li>-Is it desirable, feasible, and/or useful to review language studies related to nonverbal communication in culture in question?</li> <li>-Do nurses experience conflicts with regard to moral agency when providing care without the capacity to communicate and validate understanding due to language barrier?</li> <li>-Can nurse use picture boards to enhance communication when there is a language barrier?</li> <li>-What is the accuracy and trust between nurses and local patients when using translators?</li> <li>-Cost analysis of hiring, educating, and sustaining the quality of medical translators.</li> <li>-Describe techniques nurses use to maintain the principles of patient privacy.</li> </ul>
5. <u>Communication</u>	<ul style="list-style-type: none"> <li>-What are the best risk mitigation strategies to be used during unit and personal rotation handoffs?</li> <li>-How do expectations for information affect nurse perception of quality of care versus patient outcomes?</li> <li>-What level of communication is most valuable</li> </ul>

	<p>in terms of impacting patient care/safety?</p> <p>-In terms of “chaos theory” what is the role of communication?</p> <p>-Is communication and collaboration between disciplines the same or different from when not deployed and if so how and why?</p> <p>-What is the availability, accuracy, and long-term value of documentation?</p> <p>-Are the necessary elements of care being documented?</p> <p>-Factors associated with the value nurses put on nursing documentation.</p>
6. <u>Adapting and Improvising</u>	<p>-What is the best way to prepare nurses to care for population/patients beyond/outside of their normal scope and to rapidly move between patient types?</p> <p>-Is there a process by which nurses adapt to providing care with less technology and if so what is it and can it be improved upon?</p> <p>-If the standard method for cleaning/sterilizing equipment is not available what available alternate method can safely be used and can one-time use supplies be safely re-used?</p> <p>-Have nurses adopted innovative procedures or practices that lead to better patient outcomes and if so, what are they and how can they be adopted enterprise-wide and sustained?</p> <p>-Do we/can we teach speed and quality of adaption to nurses and if so how?</p> <p>-Do differences/shortcomings/problems in the environment affect the safety of nursing care for both patients and nurses?</p> <p>-What did nurses do in the past and what were the values and principles they learned?</p> <p>-What are the differences in adaption/processes/behaviors between deployed and not deployed environments?</p> <p>How do activities in each environment inform practice in the other?</p> <p>-Are there elements/components of nonmilitary austere nursing care that should be included in military nursing education and practices?</p> <p>-Are there theoretical differences between adaption and improvising and if so what is the clinical relevance?</p>



**Relationship of current findings to previous findings:**

As the war continues, more and more nurses write about their deployed experiences. Some have reported on their experience by providing information that supports the notion that nursing practice may at times differ from that at a fixed facility. One nurse reported her work experience at a deployed Combat Support Hospital (CSH) in support of the war in Iraq, where despite the 120-130 degree temperature, the malfunctioning of overheating equipment and the added weight of her body armor and helmet; she was able to provide optimum care to a critical care patient (Smith, 2008). She described having to be innovative and revert to manual measures, which are rarely used in a non-deployed environment. Other nurses report having to improvise nursing practice to provide optimum care due to limited supplies because of insurgent activity, the cultural needs of host nationals and detainees, and the challenges of finite beds and range of available services.

Vane et. al (2005) described patient safety issues, cleaning and work traffic patterns, interoperative concerns, postoperative concerns, infection control, human element of infection control, sterilization, water quality, hand washing, and enemy prisoners of war as issues for nurses during deployment, specifically within the operating room. The participants in the study also identified some of the same issues (refer to Table 1.) outside of the operating room environment.

When it comes to identifying research priorities, Walker, Bibb, and Elberson (2005) reported three areas of research in preparedness for mass casualty events, disaster, war and terrorism. The authors addressed issues related to the health care provider, issues affecting the patient, individual family and community and issues related to the health care system. These areas are similar to the battlefield areas identified by the expert panel (patient care, nurse, and care of local nationals). In addition, the most notable similarity between the Duong, et.al. (2005) research priority list and this study is the area of clinical resource management and military clinical practice outcomes and management. These areas were identified by both groups. Schmelz, et.al (2203) used a list of nine stressors of flight and the military environment to discuss care of the critically ill, emphasizing the impact environment has on the patients and the nurse. This too was similar to the findings of this study, where nurses spoke of common nursing care such as ostomy/wound care within the added impact of the battlefield context. The addition this study provides is that it is perhaps a more valid approach to identifying the most critical nursing research and EBPPs needs since it is the only study reported so far that uses data collected during the deployment.

**Effect of problems or obstacles on the results:**

As always with active duty military investigators especially during a time of active war, the turbulence of the team resulted repeated delays in data analysis.

**Limitations:** When the study was written the investigator thought that staff nurses would be able to identify needed research studies and EBPPs if asked. At the first focus group, it became evident that the staff nurses attending were not prepared to identify research studies or EBPPs. The plan became to collect as much real-time data as possible about battlefield nursing care, then present that analyzed data to an expert panel that would create a prioritized list of research studies and EBPPs. Additionally, since all the nurses sampled were Army and assigned to

Combat Support Hospitals, there was very little description of care provided outside of that environment.

**Conclusion:** Focus group data yielded 20 themes describing battlefield nursing care (equipment and resources, adaptation and improvising, communication, language barrier & translator issues, culture and care of local nationals, safety/delays in care/triage, unsafe unsanitary local Health Care, better time with patients & better staffing, emotional expressions, standards/scope of practice/competency issues at LPNs and Medic level, documentation, infection control, leadership demands, faster pace & environment of care, different types of patients, better teamwork, lack of patient privacy, challenges of detainee care, nursing care addressing EBP, inadequate pre-deployment training.) Using the 20 themes the expert panel generated a prioritized list of research study and EBPPs categories (patient care, nurses, equipment, medication, equipment and supplies, care of local nationals, communication, and adapting and improvising) as well as supply example studies and projects questions.

## **V. Significance of Study or Project Results to Military Nursing**

At least one Service (Army) has generated a list of research studies and EBPPs that leadership is using to drive requirements of the Active Component Nurse Scientists. For years, funding agencies have also created priorities for areas that they are interested in funding. However, this will be the first time that a battlefield study was designed to identify the real-time description of nursing care in order to establish a priority list. While the results of this study will not inform the totality of military nursing practice, it will shed light on the area of battlefield nursing. This in conjunction with the Services and other efforts to establish priorities has the potential to add to the quality of any priority list.

**VI. Changes in Clinical Practice, Leadership, Management, Education, Policy, and/or Military Doctrine that Resulted from Study or Project**

The results of this study should be used to inform research priority lists generated by service components and funding organizations. Additionally, military nursing students who are interested or directed to study battlefield-nursing issues can use this list to guide their project selections.

## **VII. References Cited**

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**VIII. Summary of Dissemination**

<b>Type of Dissemination</b>	<b>Citation</b>	<b>Date and Source of Approval for Public Release</b>
Podium Presentations	Hopkins-Chadwick, D. Battlefield Generated Research Questions & Evidence Based Practice Projects for Nursing in a Combat Environment: Analysis of Nursing Practice Study Data Collected in Iraq presented at the <b>Pacific Institute of Nursing Conference</b> , Honolulu, HI, March 2011	March 2011, BAMC ISR PAO
Poster Presentations	Hopkins-Chadwick, Denise L Army Nurse Corp Officers' Experience of Nursing Care and a Nursing Care Evidence-Base during deployment in Support of Combat Operations presented at the <b>Karen Rieder Research/Federal Nursing Poster Session</b> , St Louis , MI, November 2009	November 2009, BAMC-ISR PAO

### IX. Demographic Characteristics of the Sample

Most of the participants were 2LT-CPT (77.4%) with an average of 10.8 (SD=7.8) years in military service. Six specialty areas were represented but most (70%) were medical surgical nurses (66H) or Intensive Care Unit Nurses (70%). The mean age was 38.6 (SD=10) and they were representative of the total Army Nurse Corps with 70% White and 18% African American, 10% Hispanic, and 36% male. They reported an average of 9.2 (SD=6.8) months of deployment since 2003 (range= 1-24), however only 24 out of 83 responded to the deployment length question.

Characteristic	
Age (yrs)	38.6 SD=10 ±
Women, n (%)	(64% )
Race	
White, n (%)	(70% )
Black, n (%)	(18% )
Hispanic or Latino, n (%)	(10% )
Native Hawaiian or other Pacific Islander, n (%)	(1% )
Asian, n (%)	(1% )
Other, n (%)	( )
Military Service or Civilian	
Air Force, n (%)	( )
Army, n (%)	( )
Marine, n (%)	( )
Navy, n (%)	( )
Civilian, n (%)	( )
Service Component	
Active Duty, n (%)	( )
Reserve, n (%)	( )
National Guard, n (%)	( )
Retired Military, n (%)	( )
Prior Military but not Retired, n (%)	( )
Military Dependent, n (%)	( )
Civilian, n (%)	( )

## **X. Final Budget Report**

Funds were reallocated internally, but did not exceed the 10% threshold. The funds were reallocated from the other and travel budget categories to cover expenses in personnel and supplies. There majority of the funds remaining are in the travel budget category due to the fact that the actual travel costs for the budgeted trips were not as high and the estimated costs.